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PATENT

09/259,762

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Zhiping Yin et al.	Examiner:	Jose Diaz
Serial No.:	09/259,762	Group Art Unit:	2815
Filed:	March 1, 1999	Docket:	303.531US1
Title:	OXYGEN PLASMA TREATMENT FOR NITRIDE SURFACE TO REDUCE PHOTO FOOTING		

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Commissioner for Patents  
Washington, D.C. 20231

Applicant has reviewed the Office Action mailed on September 11, 2002. Please amend the above-identified patent application as follows.

IN THE CLAIMS

Please substitute the claim set in the appendix entitled Clean Version of Pending Claims for the previously pending claim set. The substitute claim set is intended to reflect amendment of previously pending claim 1 and addition of new claims 21-40. The specific amendments to individual claims are detailed in the following marked up set of claims.

1. (Amended) A method for reducing profile distortion in semiconductor fabrication without roughening a semiconductor substrate surface, comprising:
  - providing a semiconductor substrate comprising a film comprising silicon-nitride;
  - treating the film in a vacuum of about 3.0-6.5 Torr, for a time of about 10 seconds to about 5 minutes, and in an atmosphere [substantially] free of argon comprising oxygen plasma as the gas present in the greatest concentration wherein the oxygen plasma flow rate is at least about 300 sccm oxygen and the atmosphere renders the substrate resistant to profile distortion and roughening to make a treated substrate;
  - applying a resist to the treated substrate; and
  - patterning the resist.

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